Interreg Co-funded by the European Union

Italy – Croatia

STRENGTH

D.3.1.2
Questionnaire for students in Kastela schools

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Executive Summary

This report presents the results of a survey conducted among 189 secondary school students in Kaštela, focusing on their awareness, perceptions, and preparedness related to climate change, environmental risks, and floods. The findings show that students generally trust science and recognise climate change as a relevant societal challenge, but their practical knowledge of flood risks and response measures remains limited. While concern about floods is moderate to low, students support stronger integration of climate and flood-related topics into school education. Overall, the results highlight the need to strengthen practical risk education, improve access to reliable information, and encourage greater youth engagement in resilience-building activities.

1. Introduction

Climate change and related natural hazards, such as droughts, flash and coastal floods, and earthquakes, represent increasingly significant challenges for coastal and urban areas. The growing frequency and intensity of extreme events require a systematic approach to strengthening community resilience, improving civil protection processes, and strengthening coordination between institutions and stakeholders involved in risk management.

Beyond technical and infrastructural measures, resilience also depends on the level of public awareness, knowledge, and preparedness. Effective risk communication and education play a crucial role in supporting informed behaviour during emergency situations and fostering a culture of prevention within local communities. Understanding how young people perceive environmental and climate-related risks is particularly important, as they represent both a vulnerable group and future active members of society.

Given the circumstances mentioned, a survey was conducted to assess awareness, risk perception, and knowledge related to natural hazards among secondary school students in Kaštela, at the *Secondary School Braća Radić* in Kaštel Štafilić. The findings presented in this report contribute to a better understanding of students' attitudes towards science, environmental risks, flood preparedness, and the role of education in strengthening community resilience.

1.1. Research objective

The primary objective of the research was to assess the level of awareness, knowledge, and perception of natural hazards among secondary school students in Kaštela, with a particular focus on floods and climate-related risks.

The survey aimed to examine:

- students' trust in science and scientific institutions,
- their understanding of climate change and environmental risks,
- their perception of exposure and vulnerability to floods,
- their level of preparedness and awareness of preventive measures,

- and the role of school education in strengthening risk awareness and resilience.

By identifying prevailing attitudes and potential knowledge gaps, the research seeks to provide an evidence-based foundation for strengthening educational activities, improving risk communication, and supporting local resilience-building efforts.

1.2. Methodological overview

A quantitative research approach was applied, using a structured survey as the primary data collection method. The measurement instrument was a questionnaire designed to assess students' perceptions, knowledge, attitudes, and behavioural intentions related to environmental and flood-related risks.

In total, the questionnaire consisted of **38 questions**, organised into thematic sections covering trust in science, climate change perception, environmental risks, flood awareness, education, solidarity, and sociodemographic characteristics. The instrument included closed-ended questions (Likert scales, multiple-choice questions, ranking questions) as well as a limited number of open-ended responses. The full questionnaire is provided in Annex 1: Questionnaire in Croatian and Annex 2: Questionnaire in English.

The survey was administered online using Google Forms. A total of **189 valid responses** were collected from students of *Secondary School Braća Radić*. The data were analysed using descriptive statistical methods, and the results are presented thematically in the following sections of the report.

2. Key findings of the research

The analysis of 189 responses reveals several important findings regarding students' awareness, perceptions, and preparedness in relation to environmental and flood-related risks.

Overall, students demonstrate a generally high level of trust in science and scientific institutions. This represents a strong foundation for evidence-based environmental education and effective risk communication strategies.

At the same time, awareness of climate change appears relatively developed, with students largely recognising human influence as a significant contributing factor. However, this awareness does not always translate into active civic engagement or participation in science- and environment-related public activities.

Although environmental and flood-related risks are widely acknowledged, perceptions of personal exposure and vulnerability vary. While concern about flood risk is present, self-reported preparedness and familiarity with preventive measures suggest that practical knowledge and behavioural readiness could be further strengthened.

The findings also highlight the important role of schools in strengthening risk awareness. Students generally express support for including climate and flood-related topics within the school curriculum, suggesting that educational institutions are seen as legitimate and relevant actors in resilience-building processes.

Finally, the results suggest that solidarity and community support during emergency events are recognised as important, but institutional trust and perceptions of responsibility for risk prevention differ across governance levels.

In conclusion, the findings indicate that while baseline awareness exists, there remains significant potential to strengthen practical knowledge, preparedness, and participatory engagement among young people in order to enhance long-term community resilience.

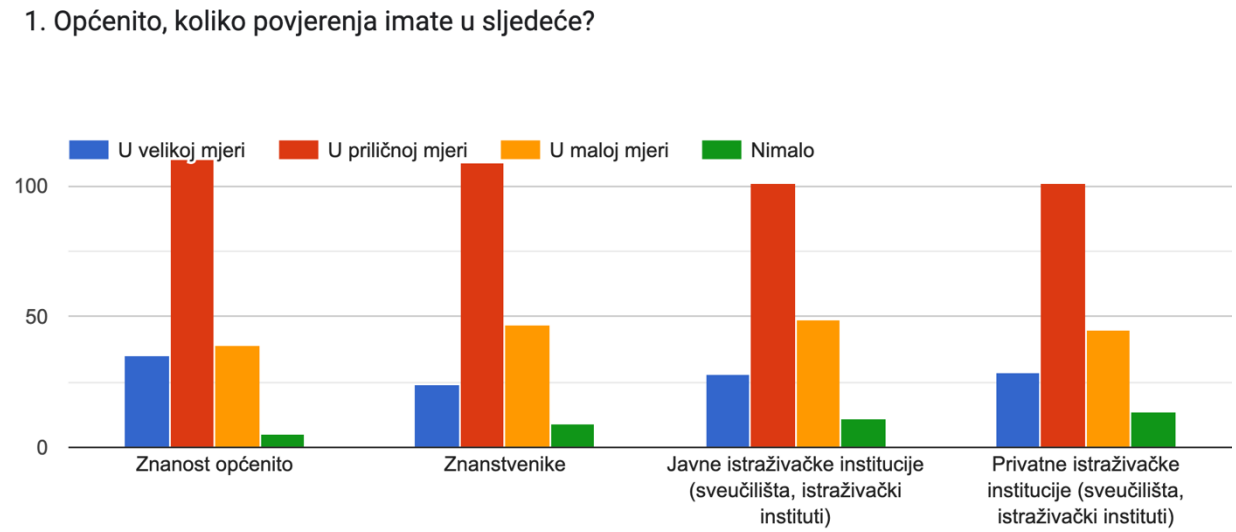
3. Analysis of the Research

This chapter presents the findings of the quantitative survey conducted among secondary school students in Kaštela. The analysis follows the thematic structure of the questionnaire and provides an interpretative overview of students' attitudes, perceptions, and self-reported behaviours related to science, climate change, environmental risks, flood awareness, education, solidarity, and basic sociodemographic characteristics. Results are presented using descriptive statistics, supported by visual outputs extracted from the Google Forms platform.

3.1 Orientations towards science and technology

This section explores students' levels of trust in science and research institutions, as well as their engagement with science- and environment-related activities over the past year.

Figure 1 Trust in science and research institutions



Students report relatively high levels of trust in science in general. A total of **18%** express trust to a great extent, while **58%** indicate trust to a fairly large extent. In other words, more than three quarters of respondents express a positive orientation toward science. At the same time, **21%** report trust only to a small extent, and only 5 respondents indicate no trust at all.

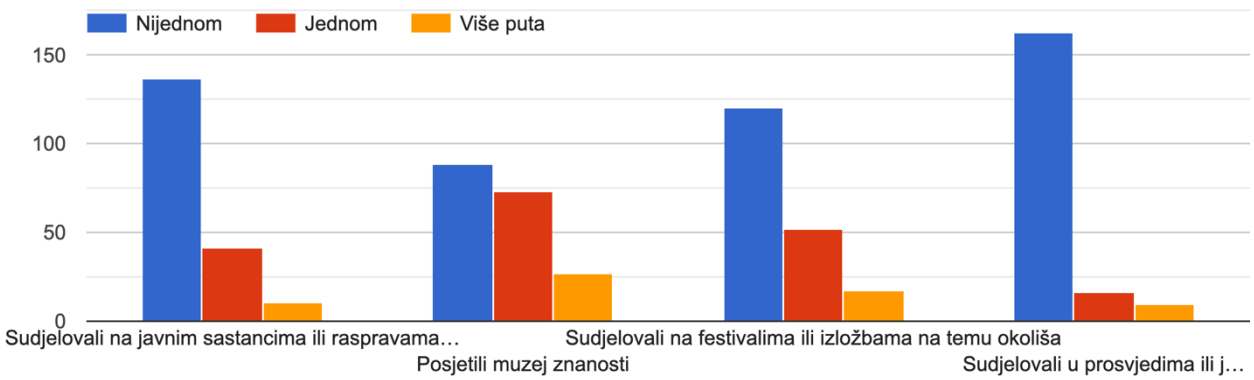
A similar pattern appears in relation to scientists. Trust to a fairly large extent is reported by **58%**, while **13%** express trust to a great extent. Meanwhile, one quarter of respondents report limited trust and only 9 respondents indicate no trust. Compared to science as a general concept, trust in scientists is slightly more reserved, but it remains predominantly positive.

Public research institutions, such as universities and research institutes, are trusted to a fairly large extent by **53%** of students and to a great extent by **15%**. However, around one quarter of respondents report limited trust, while 11 of them express no trust.

Private research institutions receive a very similar evaluation. Trust to a fairly large extent is reported by **54%**, while **15%** indicate trust to a great extent. A smaller group expresses limited trust (**24%**), and 14 respondents report no trust.

Overall, the results suggest that students maintain a generally positive orientation toward science and research institutions. Trust is concentrated primarily at the moderate rather than the highest level of the scale, suggesting cautious confidence rather than unconditional trust.

Figure 2 Participation in science- and environment-related public activities



Although students generally express positive attitudes towards science and related institutions, this does not translate into equally strong participation in science- and environment-related public activities.

When asked about participation in public meetings or discussions related to science, technology, or environmental sustainability, **72%** report that they did not participate at all during the past year. A smaller share, **22%**, participated once, and only **6%** participated more than once. This indicates that direct involvement in public debate on science- and environment-related topics is very limited among students.

Visiting a science museum appears somewhat more common. While **47%** did not visit a museum, **39%** report visiting once and **14%** more than once. This suggests that exposure to science may occur more through cultural or educational settings than through civic engagement.

Participation in environmental festivals or exhibitions is less frequent. A total of **63%** report no participation, **28%** participated once, and **9%** more than once. Therefore, these events reach only a smaller share of students, even though they represent a more accessible and informal way of engaging with environmental topics.

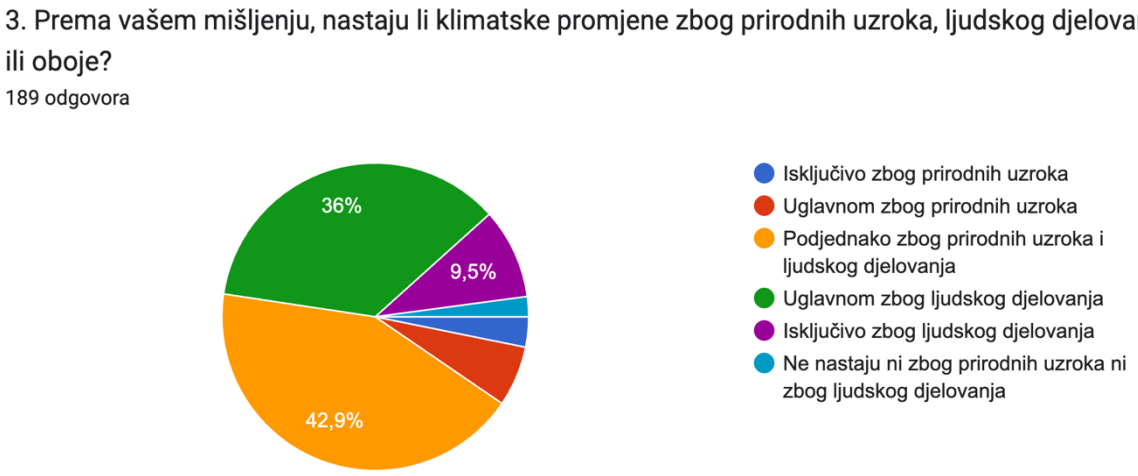
Engagement in environmental protests or public actions is the least common activity. A clear majority, **86%**, did not participate at all, while **9%** participated once and **5%** more than once. Compared with the other listed activities, this form of public engagement is clearly the most marginal, suggesting that students are much less likely to express their environmental concerns through activism or collective public action.

Taken together, these findings reveal a clear contrast between relatively high levels of trust in science and limited active engagement in science- and environment-related public activities. Students appear open to scientific knowledge and institutions, yet only a small proportion translate this orientation into civic participation.

3.2 Climate change

This section examines students' understanding of the causes of climate change, perceived barriers to climate action, and views on responsibility for addressing climate change.

Figure 3 Perceived causes of climate change



When asked whether climate change occurs due to natural causes, human activity, or both, most students recognise **the role of human influence**.

The largest share (**43%**) believe that climate change occurs equally due to natural causes and human activity. A further **36%** state that it occurs mainly due to human activity, while **10%** attribute it exclusively to human action. In contrast, only a small minority of students attribute climate change primarily or exclusively to natural causes, while only 4 respondents believe that it does not occur at all.

Taken together, these findings show that a clear majority of students (**89%**) acknowledge human influence on climate change, either as the main driver or as a significant contributing factor alongside natural causes. At the same time, the predominance of *both natural and human causes* responses suggests that students tend to perceive climate change as a complex phenomenon rather than attributing it to a single source.

Figure 4 Perceived main obstacle to climate action

When reflecting on the main obstacle to effective climate action, students most frequently point to individual behaviour. A total of **38%** believe that people are not willing to change their behaviour, identifying this as the primary barrier.

Political unwillingness is the second most frequently mentioned factor. **27%** of students state that many politicians are not prepared to address the issue seriously. Meanwhile, **18%** attribute the main obstacle to excessive economic interests. At the same time, **17%** indicate that they do not know what the main barrier is.

These responses show that students primarily associate climate inaction with human behaviour and decision-making, both at the individual and political level, rather than with a lack of knowledge or technological solutions.

Overall, the results suggest that students perceive climate inaction as a complex issue that involves behavioural, political, and economic dimensions. Importantly, the prominence of individual behaviour as the leading barrier indicates that students recognise the role of everyday actions and lifestyle choices in addressing climate change.

Figure 5 Perceived responsibility for combating climate change

When asked who is most responsible for combating climate change, the largest proportion of students (**43%**) state that responsibility lies with everyone. This reflects a strong perception of collective accountability.

Among specific actors, the European Union is most frequently identified, with **11%** of responses. Environmental organisations follow at **10%**, while national government, private companies, and local authorities are cited less often, indicating a more secondary role in students' perceptions.

A total of **6%** believe that individuals themselves are primarily responsible, suggesting that personal accountability is acknowledged but not dominant. Meanwhile, **18%** indicate that they do not know who should bear the greatest responsibility.

Overall, students tend to view climate action as a shared responsibility, supported by institutional involvement at multiple governance levels. The emphasis on collective responsibility suggests an understanding of climate change as a societal challenge that requires coordinated action rather than isolated efforts. At the same time, the relatively low share of responses assigning primary responsibility to individuals alone reinforces the idea that students expect stronger leadership from institutional actors.

3.3 Environmental risks

This set of statements provides insight into students' environmental values, their sense of responsibility, and their level of optimism.

When asked whether science and technology can solve all environmental problems, responses are relatively balanced but lean slightly toward disagreement. A total of **18%** strongly disagree and **37%** mostly disagree, while **41%** mostly agree and **4%** strongly agree. This suggests that although many students recognise the importance of science and technology, a majority do not believe these alone can provide complete solutions, suggesting that students recognise the need for broader societal and behavioural changes. A stronger consensus appears regarding personal influence. **43%** mostly agree and **14%** strongly agree that they can personally influence what happens to the environment. Meanwhile, **17%** strongly disagree and **26%** mostly disagree. This indicates that more than half of students feel a sense of influence over environmental outcomes.

Belief in the possibility of solutions is even more pronounced. **42%** mostly agree and **37%** strongly agree that solutions to environmental problems can still be found. Only **11%** strongly disagree and **10%** mostly disagree. This indicates a strong underlying optimism regarding the solvability of environmental challenges.

The strongest level of agreement appears in the statement that people should show greater interest in environmental protection. A majority of **53%** strongly agree and **25%** mostly agree, meaning that more than three quarters of students support this view. In contrast, **11%** mostly disagree and **11%** strongly disagree. These results clearly indicate a broad perception that public engagement in environmental protection should increase.

Optimism about the future of the planet, however, is more divided. **21%** strongly disagree and **35%** mostly disagree that they feel optimistic, while **36%** mostly agree and **8%** strongly agree. This results in a slight predominance of pessimistic views, indicating emotional caution despite belief in solutions.

Ethical sensitivity is visible in several statements. A large share of students express agreement with the view that nature should be protected and preserved (more than **60%**), as well as with the idea that animals have equal rights to life as humans (more than **50%**). These responses reflect a strong value-based orientation towards environmental protection.

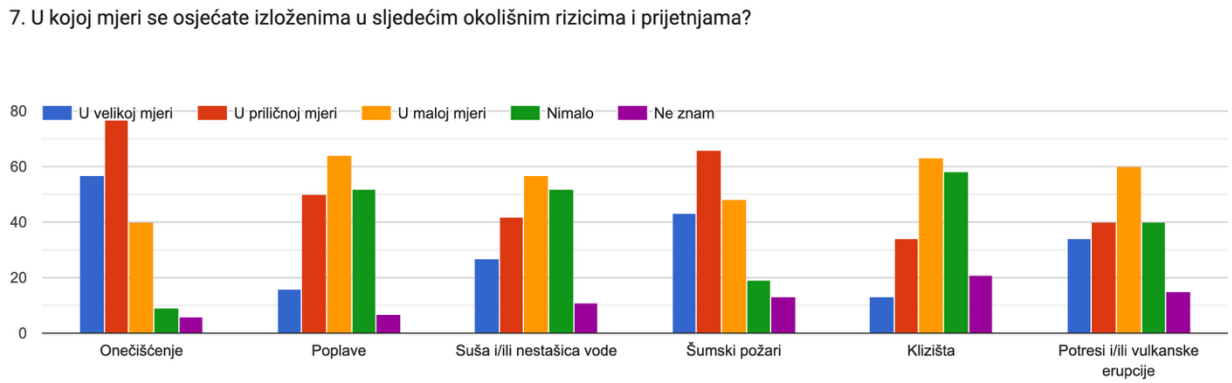
Students clearly reject dismissive views of environmental concern. A clear majority of students (more than **80%**) disagree with statements suggesting that environmental problems are exaggerated or that people worry too much about them. Similarly, most students indicate that environmental threats are personally relevant to them.

Regarding governance, **31%** strongly disagree and **34%** mostly disagree that environmental problems should be left to experts alone, while **23%** mostly agree and **12%** strongly agree. This suggests that students favour shared responsibility rather than exclusive reliance on specialists.

Finally, the idea that rich countries are responsible for solving global environmental problems receives mixed responses. **26%** strongly disagree and **39%** mostly disagree, while **28%** mostly agree and **7%** strongly agree, indicating that responsibility is perceived as broader and not limited to one group of countries.

Overall, the pattern reflects high environmental awareness, strong ethical concern, and a belief in collective responsibility, combined with moderate optimism about the future.

Figure 6 Perceived exposure to environmental risks



Students' perceptions of exposure differ depending on the type of environmental risk. Pollution is perceived as the most immediate threat. **30%** report feeling exposed to pollution to a great extent and **41%** to a fairly large extent. In contrast, **21%** report exposure to a small extent, **5%** report no exposure, and **3%** indicate that they do not know.

Overall, the distribution clearly shows a high perceived exposure to pollution compared to other risks.

When it comes to floods, perceived exposure is noticeably lower. Only **8%** of students feel exposed to floods to a great extent and **26%** to a fairly large extent. A larger share perceive limited or no exposure, with **34%** indicating exposure to a small extent and **28%** reporting none at all. Also, **4%** of students state that they do not know how exposed they are to flood-related risks. This pattern indicates that floods are generally perceived as a less immediate and less personally relevant risk.

Perceptions of exposure to drought and water scarcity show a moderate pattern. A total of **14%** report being exposed to a great extent and **22%** to a fairly large extent. Meanwhile, **30%** indicate small exposure and **28%** report no exposure at all. In addition, **6%** of students say that they do not know whether they are exposed to drought or water shortage risks. These responses suggest awareness of the issue, but without a strong sense of direct personal exposure.

Exposure to forest fires is comparatively higher. A total of **23%** of students report exposure to a great extent and **35%** to a fairly large extent. Smaller shares indicate exposure to a small extent (**25%**) or none at all (**10%**), while **7%** report that they do not know. Compared to floods and drought, forest fires are perceived as a more concrete and regionally relevant threat.

Exposure to landslides appears limited for most students. Only **7%** report exposure to a great extent and **18%** to a fairly large extent. In contrast, **33%** perceive small exposure and **31%** report none at all, while **11%** indicate that they do not know whether they are exposed to this type of risk. This suggests relatively low perceived vulnerability to landslides.

Finally, perceptions of exposure to earthquakes and volcanic eruptions are more divided. A total of **18%** report exposure to a great extent and **21%** to a fairly large extent. Meanwhile, **32%** indicate small exposure and **21%** report none at all. Additionally, **8%** state that they do not know how exposed they are. These results suggest moderate concern, with a significant portion of students perceiving at least some level of risk.

Overall, pollution and wildfires emerge as the most noticable environmental risks in students' lived experience, while floods, landslides, and drought are more often perceived as moderate or situational threats. At the same time, the presence of *don't know* responses across all categories indicates that awareness of specific local risks is not always clearly defined.

3.4 Floods

This section explores students' perceptions and experiences related to flood risk. It examines their level of concern, how likely they consider floods to occur in their area, and how exposed they believe frequently visited places are. It also addresses their awareness of past flood events, perceived causes of flooding, emotional responses during flood events, and personal involvement in preventive or support actions.

In addition, the section considers sources of information, perceived responsibility for flood prevention, preventive measures taken at home, and the role of schools in addressing flood risk.

Together, these questions provide a comprehensive picture of how flood risk is understood, experienced, and interpreted by students, as well as how it connects to everyday life, community support, and educational practices.

Figure 7 Level of concern about floods

When asked how worried they are about the possibility of a flood, most students express only mild concern. A total of **56%** report that they are somewhat worried, while **36%** state that they are not worried at all. Only 15 respondents indicate that they are very worried about potential floods.

This distribution shows that concern about floods is generally low to moderate, with only a small proportion of students expressing a high level of worry.

These results suggest that although floods are recognised as a possible risk, they do not generate strong emotional concern among the majority of students. This relatively low level of concern is consistent with earlier findings on perceived exposure, where floods were not identified as a highly immediate personal threat.

Figure 8 Frequency of thinking about flood risk

Students also report that they rarely think about flood risk in their area. A total of **55%** state that they think about it rarely, while **41%** say they never think about flood risk. Only **4%** report thinking about it often.

This distribution indicates that flood risk is largely absent from students' everyday considerations, with very few reporting frequent reflection on the issue.
When students rate the likelihood of a flood occurring in their area on a scale from 1 (very unlikely) to 10 (very likely), responses are spread across the scale, but lower values are more common.

The largest share, **18%**, choose value 1, suggesting that they perceive floods as very unlikely. Values 3 (**15%**) and 5 (**16%**) also receive notable shares, while **13%** select value 7. Very high likelihood ratings are relatively rare, with only **1%** choosing 9 and **5%** selecting 10. The remaining responses are spread across values 2 (**12%**), 4 (**8%**), 6 (**8%**) and 8 (**4%**), indicating that most students position flood risk in the low to moderate range rather than at the extreme end of the scale.

Students were also asked how exposed different places they regularly visit are in the event of a flood.

The home is perceived as largely safe. A clear majority of students (**51%**) report no exposure at all and **32%** indicate exposure only to a small extent. Smaller shares perceive their home as exposed to a fairly large extent (**7%**) or to a great extent (**6%**), while **4%** are unsure about the level of exposure. Overall, homes are not widely seen as highly vulnerable.

Perceptions differ when it comes to schools. Here, **32%** report exposure to a fairly large extent and **13%** to a great extent. At the same time, **27%** indicate small exposure and **20%** report none, while **8%** express uncertainty. Compared to homes, schools are more frequently perceived as exposed, although opinions remain divided.

For daily travel routes, **16%** report exposure to a great extent and **26%** to a fairly large extent. Meanwhile, **32%** indicate small exposure and **22%** report none. A further **4%** are unsure about the level of exposure. These results point to a moderate perception of vulnerability in everyday infrastructure.

Sports facilities are generally viewed as less exposed. A total of **39%** report no exposure and **27%** indicate small exposure. However, **14%** perceive exposure to a fairly large extent and **6%** to a great extent, while **14%** are uncertain. This relatively higher level of uncertainty may reflect limited awareness of flood risks in such locations.

A similar pattern appears for churches or youth centres. A total of **37%** report no exposure and **29%** indicate small exposure. At the same time, **15%** report exposure to a fairly large

extent and **8%** to a great extent, while **11%** remain unsure. These spaces are therefore not widely perceived as highly vulnerable.

Parks and green areas are seen as more exposed. A total of **17%** report exposure to a great extent and **24%** to a fairly large extent. Meanwhile, **33%** indicate small exposure and **20%** report none, with **6%** expressing uncertainty. This suggests that open public spaces are viewed as somewhat more at risk compared to indoor or private locations.

Transport hubs show mixed perceptions. More than **60%** of students perceive railway stations as having little or no exposure to flood risk, while a smaller share considers them to be more exposed or remains uncertain. Bus stations follow a similar pattern, with more than **55%** of students indicating low or no exposure, compared to a smaller proportion perceiving higher levels of risk. A noticeable share of students also express uncertainty, suggesting that perceptions of flood exposure in transport infrastructure are not clearly defined.

Cafés and nightclubs are mostly perceived as not exposed (**27%**) or exposed only to a small extent (**25%**). However, **21%** report exposure to a fairly large extent and **12%** to a great extent, while **15%** are unsure about the level of risk.

Shopping centres are also largely viewed as safe. A total of **42%** report no exposure and **28%** indicate small exposure. Smaller shares perceive exposure to a fairly large extent (**11%**) or to a great extent (**6%**), while **13%** are uncertain.

Overall, students tend to perceive private and commercial spaces as less exposed to flood risk, while public infrastructure and open areas are seen as somewhat more vulnerable. At the same time, a consistent share of students express uncertainty, indicating that perceptions of local flood exposure are not always clearly formed.

Figure 9 Awareness of past flood events

When asked whether they are familiar with floods that have previously occurred in their county, responses are almost evenly divided. A total of **51%** state that they are aware of such events, while **49%** report that they are not.

This near balance indicates that awareness of past flood events is present but not widespread across the entire student population.

Students were asked which floods they remember. The majority of responses refer to **recent local floods**, especially in Kaštela and surrounding coastal areas. Many students mention floods that occurred *recently*, *a few days ago*, or *this winter*, often linked to heavy rain, sea level rise, or storm events.

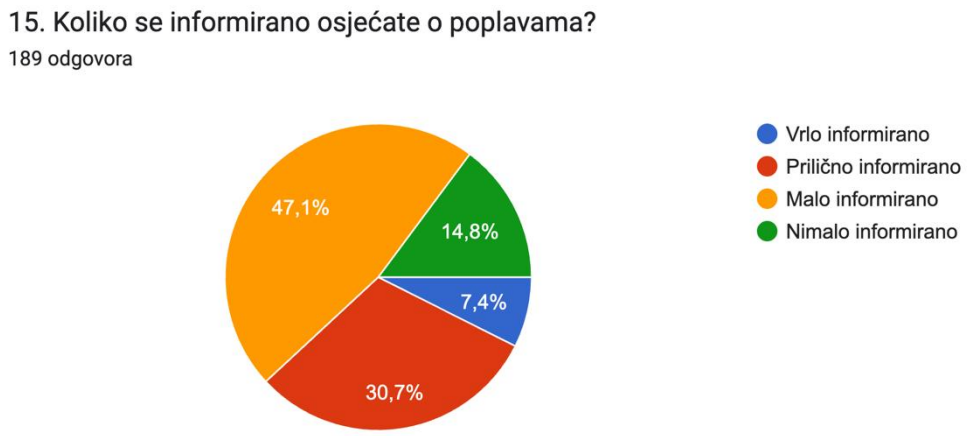
A smaller number refer to floods in nearby towns such as Split, Omiš, Trogir, or Čiovo, while very few mention major historical floods such as the 2014 floods in Gunja. References to older or nationally significant flood events are rare, suggesting limited long-term retention of such events among students.

At the same time, a noticeable share of students state that they do not remember any floods. Overall, responses suggest that students primarily recall **recent and locally experienced events**, rather than older or nationally significant disasters.

Students most frequently report learning about floods through the media. Most students mention media sources, while others say they learned through family members and through relatives or friends. Only a small number of students state that they learned about floods at school. Several students also describe direct personal experience, such as witnessing flooding in their neighborhood, although these responses appear only sporadically. This indicates that informal and media-based channels dominate students' awareness, while formal education plays a relatively limited role.

These results indicate that media and informal social networks play a more important role in information flow than formal educational channels.

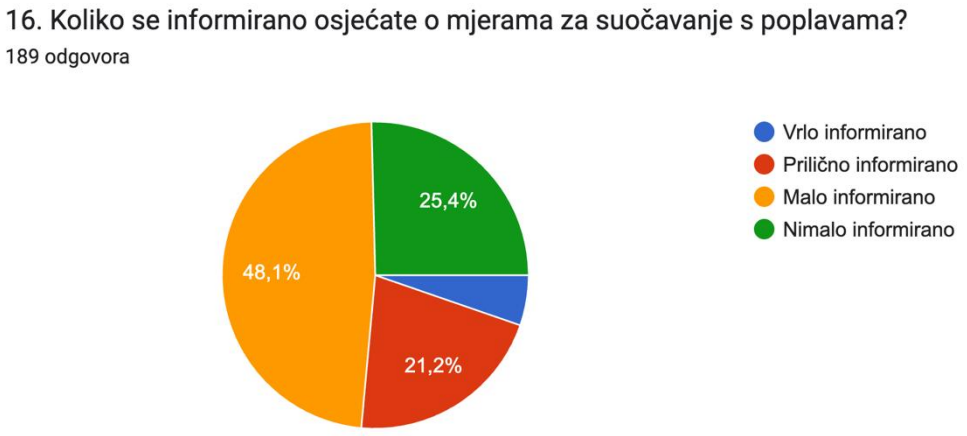
Figure 10 Perceived level of information about floods



When asked how informed they feel about floods, most students report limited knowledge. A total of **47%** feel only slightly informed and **15%** state that they are not informed at all. Meanwhile, **31%** feel fairly informed and only **7%** consider themselves very well informed. Overall, lower levels of self-assessed knowledge clearly prevail, indicating that confidence in understanding flood-related issues remains relatively limited.

This suggests that while floods are not entirely unfamiliar to students, strong confidence in their own knowledge is relatively low.

Figure 11 Perceived level of information about flood response measures



Perceived knowledge about flood response measures is even lower. A total of **48%** feel only slightly informed and **26%** state that they are not informed at all. In contrast, **21%** feel fairly informed and only **5%** feel very well informed. This distribution clearly indicates that the majority of students lack confidence in their knowledge of practical flood response measures.

Compared to general flood awareness, students appear less confident about practical measures for dealing with floods, indicating a potential gap in preparedness knowledge.

Figure 12 Awareness of local flood risk reduction initiatives

When asked whether they are aware of initiatives implemented by local authorities to reduce flood risk, a large majority of **83%** state that they are not aware of any such initiatives. Only **17%** report being familiar with local efforts.

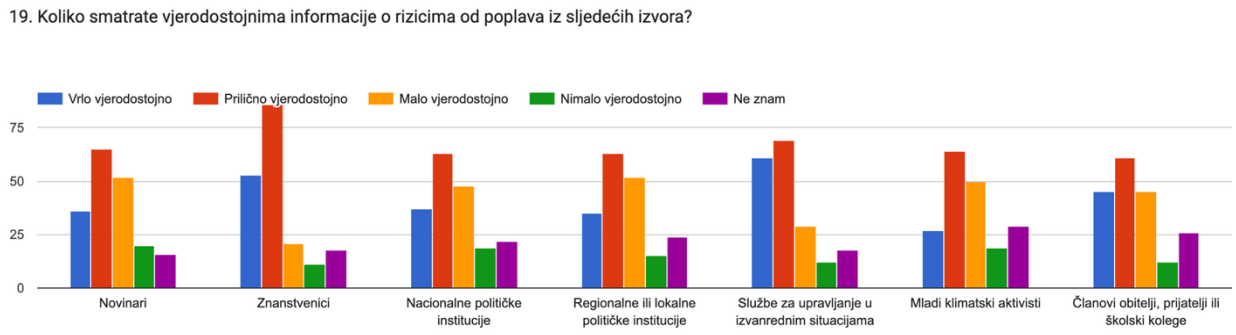
This result points to very low visibility of local flood risk reduction activities among students.

Students were asked to indicate the **sources from which they most often obtain information about flood risks**.

National media (television, newspapers, radio) are by far the most frequently mentioned source. **Social media** follow closely behind, showing that digital platforms play a major role in shaping students' awareness**. Family members, friends, and school peers** are also commonly cited, suggesting that informal communication channels remain important. **Regional or local media** are mentioned less frequently, while **institutional sources** such as emergency management services, scientists, and political institutions are selected by a smaller number of students. **Podcasts** and other alternative sources appear only marginally.

These findings indicate a strong reliance on easily accessible and informal information channels, rather than on official or expert sources.
Overall, students rely primarily on media, especially national and social media, as well as personal networks, while official and expert institutions play a noticeably smaller role in their information landscape.

Figure 13 Perceived Credibility of Flood Risk Information Sources



Students were asked to evaluate how credible they consider different sources of information about flood risks.

The highest level of trust is clearly attributed to scientists. A total of **28%** consider them very credible and **45%** fairly credible, meaning that nearly three quarters express a positive evaluation. Only **11%** rate them as slightly credible and **6%** as not credible at all, while **10%** are unsure.

Emergency management services, such as civil protection and firefighters, are also strongly trusted. A total of **32%** rate them as very credible and **37%** as fairly credible. Smaller shares consider them slightly credible (**15%**) or not credible at all (**6%**), while **10%** remain uncertain.

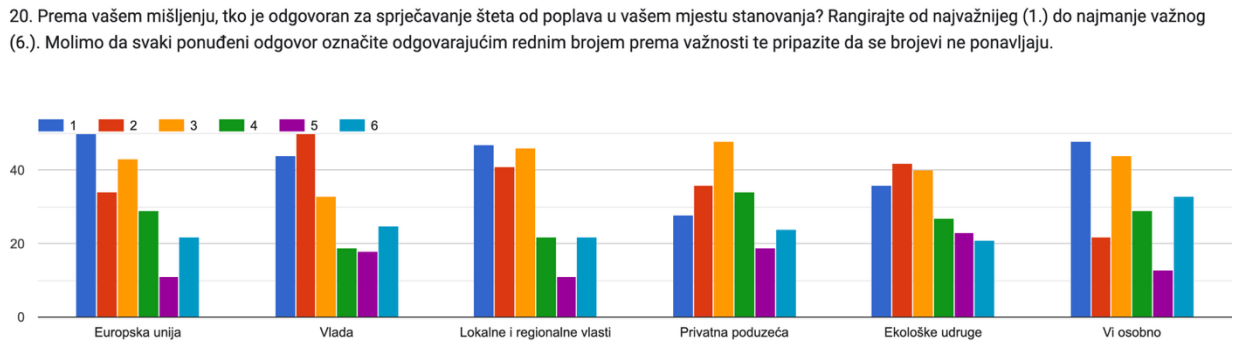
Journalists receive more mixed assessments. A total of **19%** consider them very credible and **34%** fairly credible, but **28%** rate them as slightly credible and **11%** as not credible at all. A further **8%** express uncertainty. This distribution reflects moderate trust, but also a notable degree of scepticism towards media sources.

Political institutions receive similarly divided evaluations. More than half of students consider both national and regional/local political institutions to be very or fairly credible, while a substantial share (around one third) rates them as only slightly credible. A smaller proportion expresses no trust at all, and a noticeable share remains uncertain. These patterns indicate a cautious and somewhat fragmented level of trust in political actors. Young climate activists receive somewhat lower and more divided credibility ratings. A total of **14%** consider them very credible and **34%** fairly credible, while **27%** rate them as slightly credible and **10%** as not credible at all. A relatively high **15%** are unsure.

Family members, friends, and school peers occupy a middle position. A total of **24%** rate them as very credible and **32%** as fairly credible, while **24%** consider them slightly credible and **6%** not credible at all. Uncertainty reaches **14%**.

Overall, a clear pattern emerges: students place the strongest trust in scientific and emergency institutions, while political actors and media sources are approached with more caution. Informal networks are widely used, but their perceived credibility remains moderate rather than dominant.

Figure 14 Distribution of Responsibility for Flood Risk Prevention Across Stakeholders



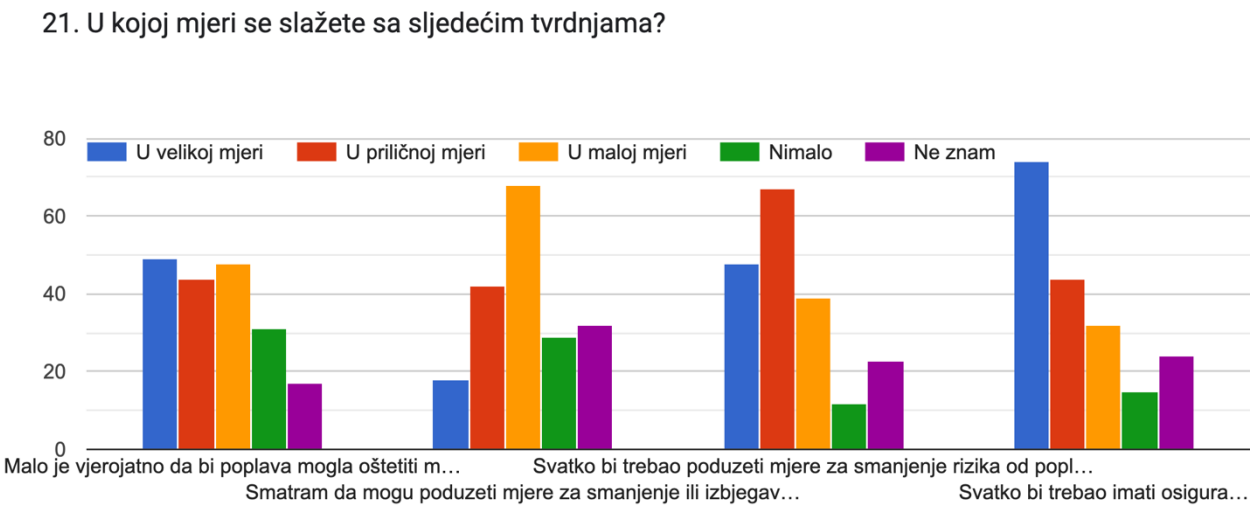
Students were asked to rank who they consider most responsible for preventing flood damage in their area.

The European Union is most frequently ranked as the most important actor by **27%** of students, followed closely by local and regional authorities (**25%**) and personal responsibility (**25%**). The national government is ranked first by **23%**.

Private companies and environmental organisations are less frequently placed at the top of the ranking.

Overall, the distribution suggests that students perceive responsibility for flood prevention as shared across multiple levels of governance, including supranational institutions, national authorities, local actors, and individuals themselves. This again reflects a strong perception of distributed responsibility rather than reliance on a single actor.

Figure 15 Attitudes Towards Flood Risk and Preparedness



Students were asked to evaluate several statements related to flood risk and personal responsibility.

When considering the statement that it is unlikely that a flood could damage their home or property, responses are relatively divided. A total of **26%** agree to a great extent and **23%** to a fairly large extent, suggesting that nearly half perceive their home as relatively safe. However, **25%** agree only to a small extent and **17%** not at all, while **9%** are unsure. This indicates a moderate sense of perceived safety, combined with a notable level of uncertainty and residual concern.

Perceived personal capacity to reduce or avoid flood consequences appears more limited. Only **10%** agree to a great extent that they can take effective measures, and **22%** agree to a fairly large extent. Meanwhile, **36%** agree only to a small extent and **15%** not at all, while **17%** are unsure. These results point to low confidence in individual ability to manage or mitigate flood impacts.

In contrast, responsibility is more clearly acknowledged when framed as a general obligation. A total of **25%** agree to a great extent and **36%** to a fairly large extent that everyone should take measures to reduce flood risk for their home. Smaller shares agree only to a small extent (**21%**) or not at all (**6%**), while **12%** remain unsure. This suggests a

strong normative acceptance of shared responsibility, even where personal efficacy is perceived as limited.

Support is even stronger regarding flood insurance. A total of **39%** agree to a great extent and **23%** to a fairly large extent that everyone should have flood insurance. Meanwhile, **17%** agree only to a small extent and **8%** not at all, while **13%** are unsure. Overall, financial preparedness appears to be widely endorsed.

Taken together, these results show that while students may feel uncertain about their personal ability to reduce flood damage, they largely recognise the importance of preventive action and insurance.

Regarding students' direct experience during the most recent flood event, most students report that they were at home during the event, accounting for **67%** of responses. A smaller share of students were at school or on the street.

A number of students indicate that they were not present in the area at the time, were living elsewhere, or did not personally experience the event. This suggests that although the majority were directly exposed to the situation in their local environment, a significant minority experienced it indirectly or not at all.

Students were asked to rate **how much fear they personally felt during the flood** on a scale from 1 (none) to 10 (very high).

Half of the students, **51%**, select value 1, indicating that they did not feel fear at all. Lower levels of fear remain dominant across the scale: **9%** choose 2, **8%** select 3, and **10%** select 4. Moderate levels are less frequent, with **6%** choosing 5 and **6%** choosing 6.
Higher levels of fear are comparatively rare. Only **3%** select 7, **4%** select 8, **1%** select 9, and **2%** select the highest value of 10.

Overall, the distribution shows that emotional responses to the flood event were generally low, with strong fear reported by only a small minority of students.
Taken together, the full distribution across the scale indicates that strong fear was experienced by only a small minority, while most students report little to no emotional distress during the flood event.

When asked about the **main cause of the 2022 flood**, approximately half of students attribute it to **heavy rainfall**, making it the most frequently mentioned explanation. Around one fifth point to poor maintenance of watercourses, while a smaller share refer to wind as a contributing factor.

Other causes, such as permanent soil sealing or urbanisation, melting snow, or artificial river diversion, are mentioned only occasionally.

Some students state that they do not know the cause, while others indicate that they are unsure which flood was being referenced. Very few responses mention climate change or broader human responsibility, and some students note that they were not living in Kaštela at the time.

Overall, students tend to interpret the flood primarily as the result of immediate natural factors, with limited recognition of underlying structural or climate-related causes.
Students were asked which **preventive measures** had been taken in their homes in response to flood risk.

The most frequently selected response is that **nothing was undertaken**. This suggests that a substantial share of households did not implement any specific preventive action. Among those who reported taking measures, the most common step is **protecting doors and windows from possible water intrusion**. This is followed by **moving important items to higher floors** and avoiding storing valuable items in basements or garages.

Fewer students report **informing themselves about local emergency plans**, indicating that structural or household-level measures are more common than formal engagement with local preparedness strategies.
A small number of students indicate that they do not know whether any measures were taken.

Overall, the findings show that while some practical actions were implemented at the household level, a large group of students report that no preventive steps were taken at all, pointing to limited preparedness in many homes.

Students were also asked **which reasons might prevent them and their families from taking preventive measures**.

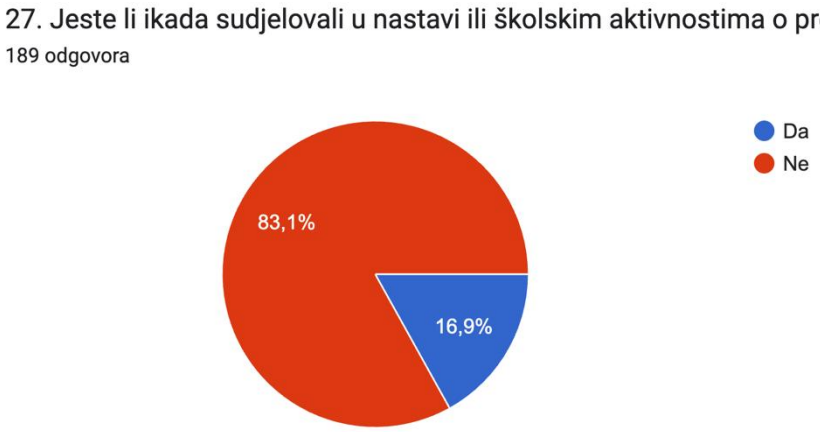
The most common response is that there are **no obstacles**, however, a lot of students identify **lack of information** as a potential barrier, indicating that awareness and access to knowledge remain important challenges. **Economic reasons** are also mentioned, while only a few students state that they do not know what might prevent them from taking action.

This distribution shows that although many respondents do not perceive structural barriers, informational gaps appear to be a significant limiting factor in strengthening household preparedness.

3.5 Education and school

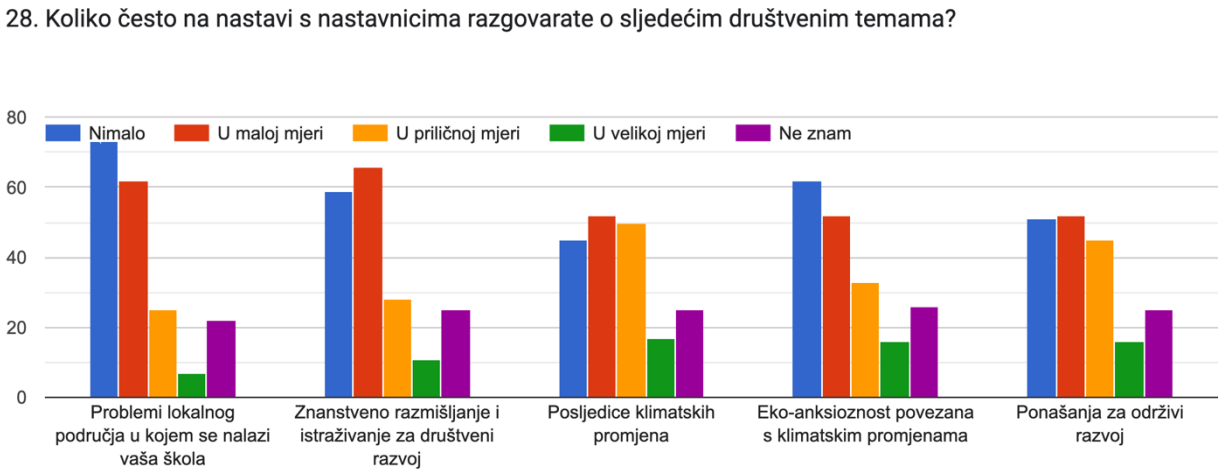
This section examines students' experiences with climate and flood-related education in schools. It explores whether they have participated in activities related to flood risk prevention, how often environmental and social topics are discussed in class, their views on the role of schools in climate education, and how prepared they perceive their teachers to be when addressing these issues.

Figure 16 Involvement in Flood Risk Prevention Education



Participation in lessons or school activities specifically focused on flood risk prevention appears limited. A substantial **83%** report that they have never participated in such activities, while only **17%** indicate that they have. This distribution clearly shows that flood risk prevention is not systematically integrated into regular school activities. Although some exposure exists, it reaches only a relatively small share of students.

Figure 17 Frequency of Discussions on Environmental Topics in School



Discussion of local problems in the area where the school is located appears relatively infrequent. A total of **38%** report that this topic is not discussed at all, and **33%** say it is addressed only to a small extent. Only **13%** indicate discussion to a fairly large extent and **4%** to a great extent, while **12%** are unsure.

These results indicate that locally relevant environmental and social issues are only weakly embedded in classroom discussions.

Scientific thinking and research as tools for social development are also discussed rather modestly. A total of **31%** report no discussion at all, and **35%** say this topic is discussed only to a small extent. Discussion to a fairly large extent is reported by **15%**, and to a great extent by **6%**, while **13%** indicate that they do not know.

This pattern points to a limited integration of applied scientific reasoning in everyday classroom conversations.

The consequences of climate change appear somewhat more present in classroom discourse. Although **24%** report no discussion and **28%** only limited discussion, a combined **35%** indicate that this topic is discussed to a fairly large or great extent (26% fairly large, 9% great). Meanwhile, **13%** remain unsure.

Compared to other themes, climate change consequences seem to receive slightly more attention, though still not consistently across all classrooms.

Eco-anxiety is discussed less frequently. A total of **33%** report that it is not discussed at all, and **28%** say it is addressed only to a small extent. Discussion to a fairly large extent is reported by **17%**, and to a great extent by **8%**, while **14%** indicate uncertainty.

This indicates that the emotional and psychological dimensions of climate change are only partially recognised within the school context.

Discussions about behaviours that support sustainable development show a slightly more balanced distribution. No discussion is reported by **27%**, and limited discussion by **28%**. Meanwhile, **24%** report discussion to a fairly large extent and **8%** to a great extent. A further **13%** are unsure.

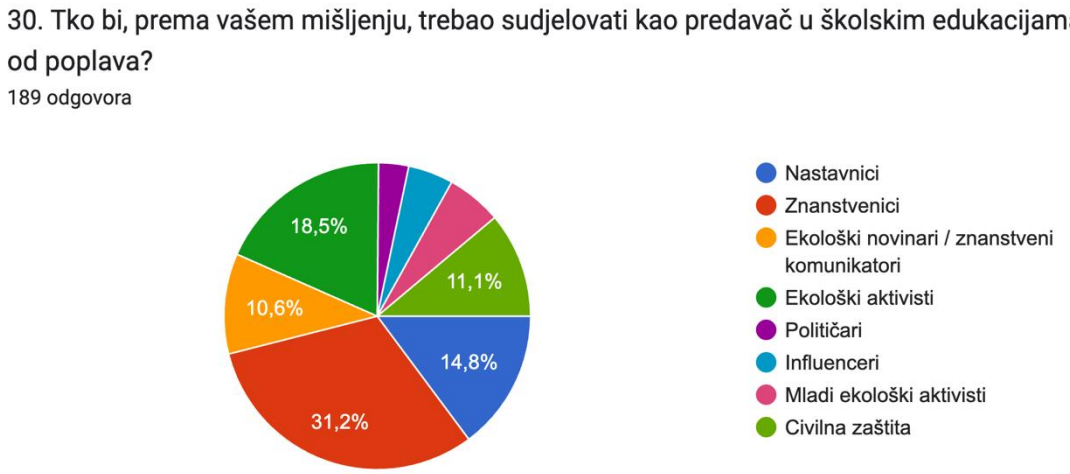
Although sustainable behaviour is somewhat more present in classroom discussions, it is still most commonly addressed only to a limited extent.

Figure 18 Attitudes Towards Including Flood Risk Topics in School Curriculum

Support for including activities related to flood risk in schools is relatively strong. A combined **68%** express support. Among those who are less supportive, **23%** selected *probably not*, while a smaller share of **9%** expressed a clearly negative position by choosing *definitely not*.

This distribution indicates a clear overall preference for integrating flood risk topics into the school curriculum, although not without a notable minority expressing reservations.

Figure 19 Preferred Educators for Flood Risk Topics

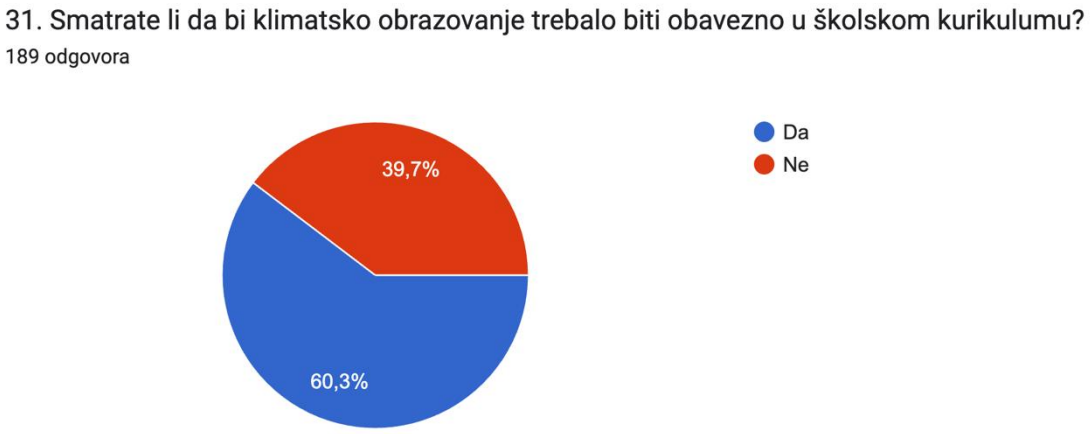


Students were asked to indicate which **actors they consider most suitable to deliver school education on flood risk**.

Scientists received the highest level of support at **31%**, followed by environmental activists at **18%** and teachers at **15%**. Civil protection services were selected by **11%**, while environmental journalists or science communicators account for **11%**.
Smaller shares selected young environmental activists (**6%**), influencers (**5%**), and politicians (**3%**).

The distribution indicates that students clearly prioritise scientific expertise and professional emergency services when it comes to flood risk education, while political and social media figures are perceived as less suitable in the school context.

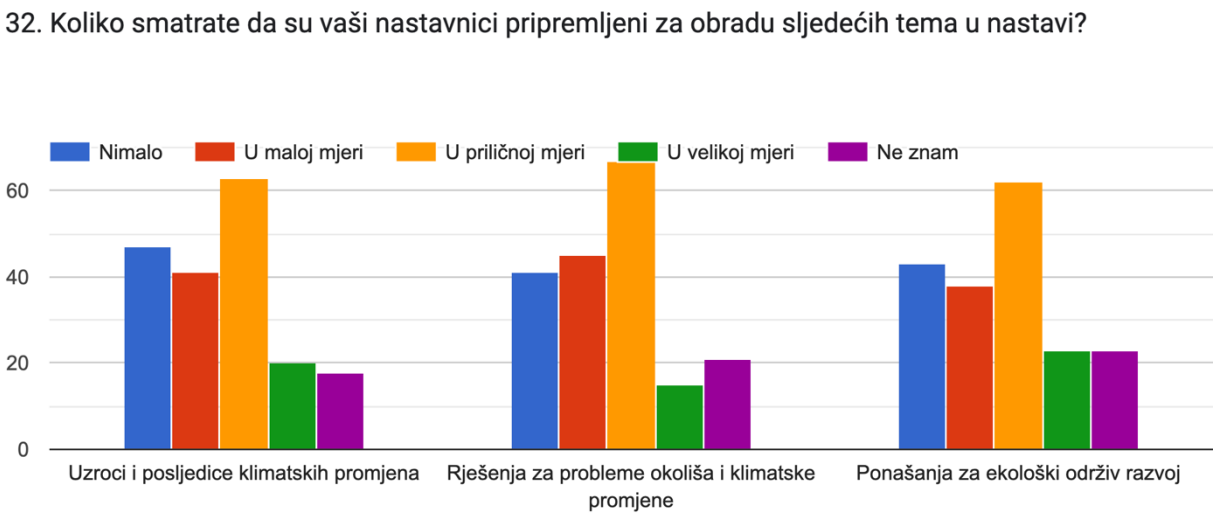
Figure 20 Attitudes Towards Mandatory Climate Education in School Curriculum



Support for making climate education mandatory in the school curriculum is relatively strong. A total of **60%** of students believe that climate education should be mandatory, while **40%** do not share this view.

This distribution indicates that a clear majority of students support the formal integration of climate education into the curriculum, although a substantial minority remains unconvinced.

Figure 21 Perceptions of Teachers' Preparedness for Environmental Topics



Students evaluated **how well their teachers are prepared to address the causes and consequences of climate change**.

A total of **25%** believe teachers are not prepared at all, and **22%** think they are prepared only to a small extent. Meanwhile, **33%** perceive preparedness to a fairly large extent and **11%** to a great extent. A further **9%** are unsure.

This suggests that perceptions of teacher preparedness are centred around moderate levels, with relatively limited confidence in strong expertise.

Students also assessed **teacher preparedness to explain solutions to environmental and climate-related challenges**.

A total of **22%** report no preparedness at all and **24%** limited preparedness. On the other hand, **35%** perceive preparedness to a fairly large extent and **8%** to a great extent, while **11%** indicate uncertainty.

A similar pattern emerges, with moderate confidence prevailing but strong confidence remaining comparatively low.

Teacher preparedness to address sustainable behaviour is perceived somewhat more positively.

A combined **45%** perceive teachers as prepared to a fairly large or great extent (33% fairly large and 12% great). In contrast, **23%** believe teachers are not prepared at all and **20%** only to a small extent, while **12%** are unsure.

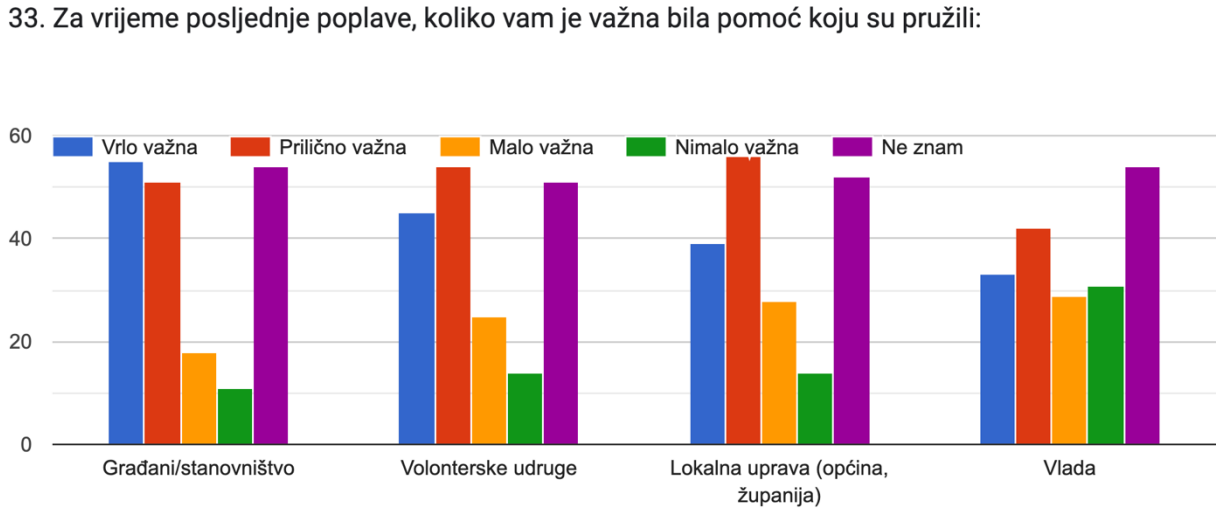
Across all three topics, moderate preparedness is the dominant perception. Strong confidence remains limited, yet complete lack of preparedness is also not the prevailing view.

Overall, the findings suggest that while schools are recognised as important spaces for climate education, there is room to strengthen both the depth and confidence of teaching in this area.

3.6 Solidarity and support

This section examined how students perceived the importance of different actors during the most recent flood, whether they personally participated in providing assistance, and how much solidarity they felt from various groups.

Figure 22 Perceived Importance of Support During Flood Events



Students evaluated how important the assistance of different actors was during the last flood.

Help provided by citizens was perceived as important by a large share. A total of **29%** considered it very important and **27%** fairly important. In contrast, **10%** viewed it as only slightly important and **6%** as not important at all, while **28%** indicated that they did not know. This suggests that peer-to-peer and community-based support is widely recognised as a key component of crisis response.

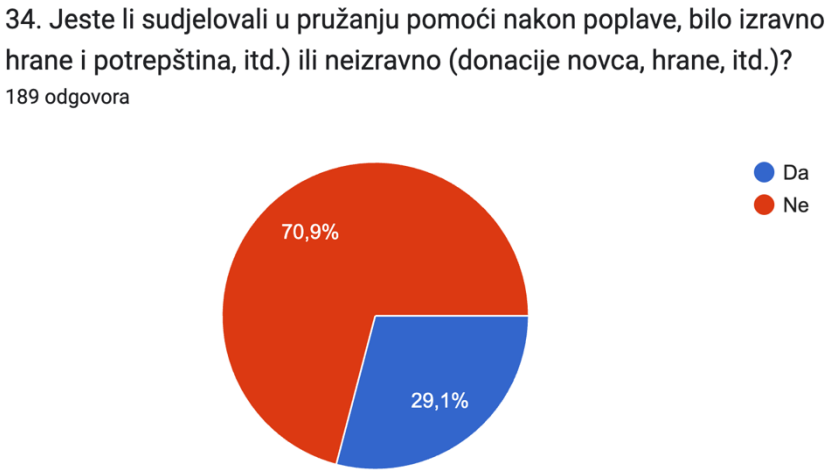
Volunteer organisations were also perceived positively. A total of **24%** considered their help very important and **29%** fairly important. Meanwhile, **13%** perceived it as slightly important and **7%** as not important at all, while **27%** were unsure. These results indicate that organised civil society actors are also seen as important contributors during emergency situations.

Local authorities received a somewhat more moderate evaluation. A total of **21%** considered their help very important and **30%** fairly important. At the same time, **15%** viewed it as slightly important and **7%** as not important at all, while **27%** indicated uncertainty. Compared to citizens and volunteers, institutional actors are perceived as somewhat less consistently important.

The government received the lowest evaluation overall. Only **17%** perceived its assistance as very important and **22%** as fairly important. In contrast, **15%** viewed it as slightly important and **17%** as not important at all, while **29%** were unsure. This indicates comparatively lower confidence in national-level support during flood events.

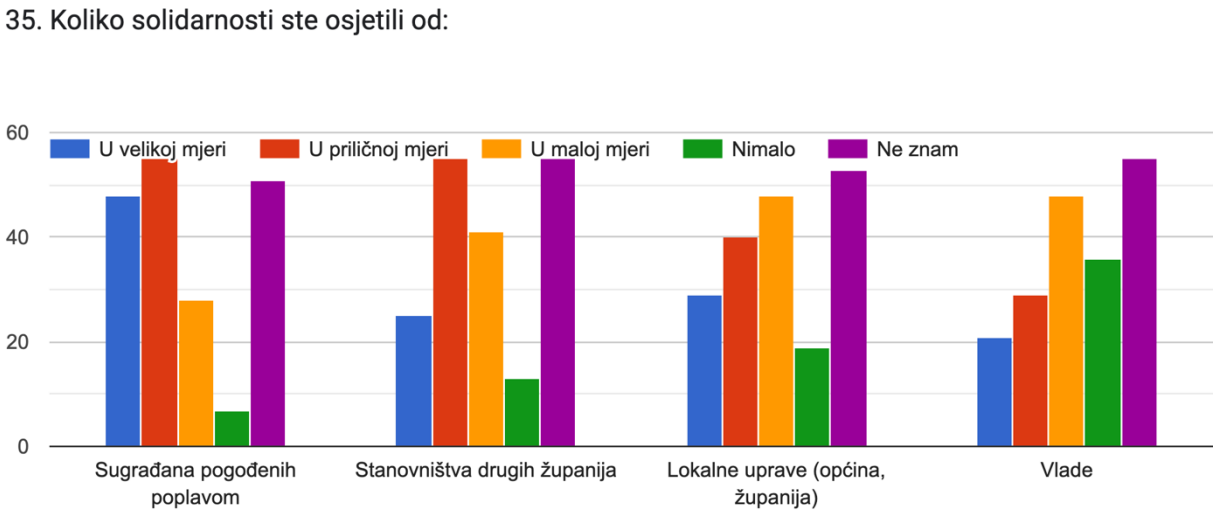
Overall, assistance from citizens and volunteer organisations was perceived more positively than that of governmental actors.

Figure 23 Participation in Post-Flood Assistance Activities



Personal involvement in post-flood assistance remained relatively limited. A total of **29%** indicated that they had participated in providing help, either directly through physical support or indirectly through donations. In contrast, **71%** stated that they had not been involved.
Although solidarity was recognised in previous responses, these figures suggest that active engagement in relief efforts was confined to a smaller share of respondents.

Figure 24 Perceived Level of Solidarity During Flood Events



Students also assessed how much solidarity they felt from different groups during the flood.

Solidarity from fellow citizens affected by the flood was perceived relatively strongly. A total of **25%** reported feeling solidarity to a great extent and **29%** to a fairly large extent. Meanwhile, **15%** perceived it to a small extent and **4%** not at all, while **27%** were unsure. This indicates that solidarity is most strongly experienced at the community level among those directly affected.

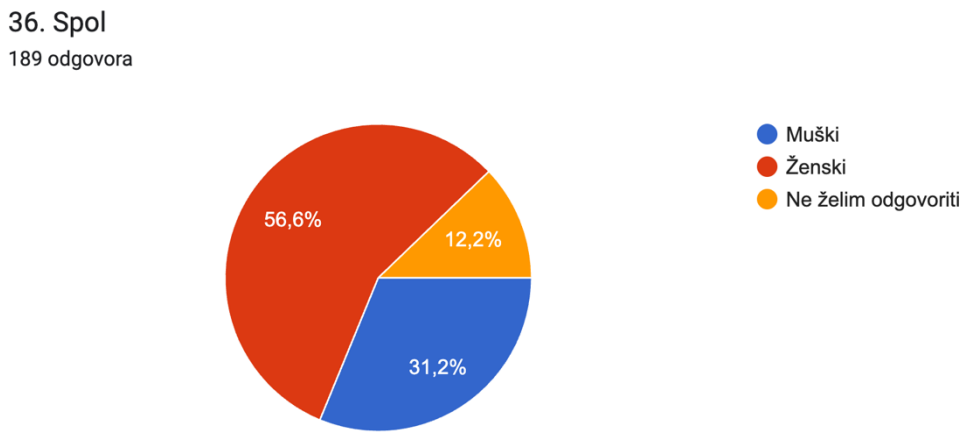
Solidarity from residents of other regions was perceived somewhat less strongly. A total of **13%** reported feeling solidarity to a great extent and **29%** to a fairly large extent. In contrast, **22%** perceived it to a small extent and **7%** not at all, while **29%** indicated uncertainty. Support from outside the immediate community is therefore recognised, but less strongly felt.

Local authorities were evaluated more cautiously. A total of **15%** reported solidarity to a great extent and **21%** to a fairly large extent. Meanwhile, **26%** perceived it only to a small extent and **10%** not at all, while **28%** were unsure. This suggests a more reserved perception of institutional solidarity at the local level.

The government received the lowest evaluation in terms of solidarity. A total of **11%** reported feeling solidarity to a great extent and **15%** to a fairly large extent. In contrast, **26%** perceived it to a small extent and **19%** not at all, while **29%** were unsure. These findings reinforce the perception of weaker connection and support at the national level. Overall, the results highlight a clear pattern: trust and perceived support are highest at the community level, while more distant institutional actors are viewed with greater uncertainty and less emotional connection.

3.7 Sociodemographic characteristics

Figure 25 Gender



The sample consisted of **31%** male students and **57%** female students, while **12%** preferred not to disclose their gender.

The reported years of birth were predominantly between **2006 and 2010**, which aligns with the expected age range of secondary school students. Only a small number of entries fell outside this range and appear to be isolated responses.

Regarding place of residence, the vast majority of respondents reported living in **Kaštela and Split**, including specific neighbourhoods and districts such as Kaštel Novi, Kaštel Stari, Kaštel Štafilić, and Kaštel Sućurac. A smaller share indicated residence in nearby

municipalities such as **Trogir, Solin, Klis, Okrug Gornji, Dugopolje, Dicmo, and Trilj**, as well as several other settlements within the wider Split-Dalmatia region.

Taken together, the data confirm that the sample consists of secondary school students primarily from the Kaštela-Split area and its surroundings. This geographical concentration provides important context for interpreting earlier findings, especially those related to local flood experiences and perceptions of environmental risk.

4. Conclusion

The findings provide a comprehensive overview of secondary school students' attitudes toward science, climate change, flood risk, and the role of education in environmental awareness.

Overall, students demonstrated a generally positive orientation toward science and research institutions, characterised by moderate but not unconditional trust. At the same time, active civic engagement in science- and environment-related activities remained limited, revealing a clear gap between favourable attitudes and actual participation. Regarding climate change, most students recognised human influence as either the primary or a significant contributing factor. Perceived barriers to climate action were seen as multidimensional, involving individual behaviour, political will, and economic interests. Responsibility for addressing climate change was understood as shared across different actors, reflecting awareness of its complexity.

In the context of floods, perceived personal risk was generally moderate to low, yet recent local experiences clearly shaped students' awareness. Assistance from citizens and volunteer organisations was valued more positively than support from governmental actors, and solidarity was perceived as strongest at the community level.

Within the educational domain, participation in flood prevention activities was limited, yet support for stronger integration of flood and climate topics in schools was evident. Students expressed a clear preference for expert-led education, particularly by scientists and emergency services. Teacher preparedness was most often perceived as moderate, suggesting room for further strengthening environmental and climate-related competencies in schools.

Taken together, the results indicate that students show awareness and openness toward environmental challenges, but this awareness is not yet consistently translated into knowledge, preparedness, or active engagement.

These findings highlight the importance of strengthening the role of education systems, improving access to reliable information, and promoting practical involvement in risk prevention activities in order to enhance long-term community resilience.

5. Annex 1: Questionnaire in Croatian

ORIJENTACIJE I IZLOŽENOST ZNANOSTI I TEHNOLOGIJI

1. Općenito, koliko povjerenja imate u sljedeće? (jedan odgovor po retku)

	U velikoj mjeri	U priličnoj mjeri	U maloj mjeri	Nimalo
a) Znanost općenito	[4]	[3]	[2]	[1]
b) Znanstvenike	[4]	[3]	[2]	[1]
c) Javne istraživačke institucije (sveučilišta, istraživački instituti)	[4]	[3]	[2]	[1]
d) Privatne istraživačke institucije (sveučilišta, istraživački instituti)	[4]	[3]	[2]	[1]

2. Koliko ste puta tijekom protekle godine učinili sljedeće?

	Nijednom	Jednom	Više puta
Sudjelovali na javnim sastancima ili raspravama o znanosti i tehnologiji ili o okolišu i održivosti	[1]	[2]	[3]
Posjetili muzej znanosti	[1]	[2]	[3]
Sudjelovali na festivalima ili izložbama na temu okoliša	[1]	[2]	[3]
Sudjelovali u prosvjedima ili javnim akcijama vezanima za okolišna pitanja (npr. klimatski štrajkovi, klimatski marševi i sl.)	[1]	[2]	[3]

KLIMATSKE PROMJENE

3. Prema vašem mišljenju, nastaju li klimatske promjene zbog prirodnih uzroka, ljudskog djelovanja ili oboje? (jedan odgovor)

Isključivo zbog prirodnih uzroka	[1]
Uglavnom zbog prirodnih uzroka	[2]
Podjednako zbog prirodnih uzroka i ljudskog djelovanja	[3]
Uglavnom zbog ljudskog djelovanja	[4]
Isključivo zbog ljudskog djelovanja	[5]

Ne nastaju ni zbog prirodnih uzroka ni zbog ljudskog djelovanja	[0]

4. Prema vašem mišljenju, koja je glavna prepreka djelovanju protiv klimatskih promjena? (jedan odgovor)

Previše gospodarskih interesa	[1]
Mnogi političari nisu spremni baviti se tim pitanjem	[2]
Ljudi nisu spremni promijeniti svoje ponašanje	[3]
Ne znam	[99]

5. Prema vašem mišljenju, tko je najodgovorniji za borbu protiv klimatskih promjena?

Europska unija	[1]
Vlada	[2]
Lokalne i regionalne vlasti	[3]
Privatna poduzeća	[4]
Ekološke udruge	[5]
Vi osobno	[6]
Svi	[7]
Ne znam	[99]

OKOLIŠNI RIZICI

6. U kojoj se mjeri slažete sa sljedećim tvrdnjama o okolišnim pitanjima?

	U potpunosti se ne slažem	Uglavnom se ne slažem	Uglavnom se slažem	U potpunosti se slažem
Znanost i tehnologija mogu riješiti sve okolišne probleme.				
Osobno mogu utjecati na ono što se događa s okolišem.				
Još uvijek možemo pronaći rješenja za okolišne probleme.				
Ljudi bi trebali pokazivati veći interes za zaštitu okoliša.				

Optimističan/na sam u pogledu budućnosti planeta.				
Priroda je sveta i trebali bismo je ostaviti netaknutom.				
Ljudi se previše brinu oko okolišnih problema.				
Vjerujem da svatko od nas može značajno pridonijeti zaštiti okoliša.				
Prihvatljivo je koristiti životinje u medicinskim pokusima ako se time mogu spasiti ljudski životi.				
Okolišne probleme treba prepustiti stručnjacima.				
Bogate zemlje odgovorne su za rješavanje okolišnih problema u svijetu.				
Životinje bi trebale imati jednako pravo na život kao i ljudi.				
Prijetnje okolišu me se ne tiču.				
Okolišni problemi su pretjerano naglašeni.				

7. U kojoj mjeri se osjećate izloženima u sljedećim okolišnim rizicima i prijetnjama?

	U velikoj mjeri	U priličnoj mjeri	U maloj mjeri	Nimalo	Ne znam
a) Onečišćenje	[4]	[3]	[2]	[1]	[99]
b) Poplave	[4]	[3]	[2]	[1]	[99]
c) Suša i/ili nestašica vode	[4]	[3]	[2]	[1]	[99]
d) Šumski požari	[4]	[3]	[2]	[1]	[99]
e) Klizišta	[4]	[3]	[2]	[1]	[99]
f) Potresi i/ili vulkanske erupcije	[4]	[3]	[2]	[1]	[99]

POPLAVE

8. Razmišljajući o mogućnosti poplave, koliko ste zabrinuti?
☐ Uopće nisam zabrinut/a ☐ Pomalo sam zabrinut/a ☐ Vrlo sam zabrinut/a

9. Koliko često razmišljate o riziku od poplave koji bi mogao utjecati na vaše područje?
☐ Nikada ☐ Rijetko ☐ Često

10. Na ljestvici od 1 do 10 (gdje 1 znači "malo vjerojatno", a 10 "vrlo vjerojatno"), kako biste opisali rizik od poplave u vašem području?

1 2 3 4 5 6 7 8 9 10
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

11. Koliko su, prema vašem mišljenju, sljedeća mjesta koja često posjećujete izložena riziku u slučaju poplave?

	U velikoj mjeri	U priličnoj mjeri	U maloj mjeri	Nimalo	*Ne znam*
Vaš dom	[4]	[3]	[2]	[1]	[99]
Vaša škola	[4]	[3]	[2]	[1]	[99]
Rute kojima se uobičajeno krećete	[4]	[3]	[2]	[1]	[99]
Teretana ili mjesto gdje se bavite sportom	[4]	[3]	[2]	[1]	[99]
Crkva ili centar za mlade	[4]	[3]	[2]	[1]	[99]
Parkovi i zelene površine	[4]	[3]	[2]	[1]	[99]
Željeznička stanica	[4]	[3]	[2]	[1]	[99]
Autobusna stanica	[4]	[3]	[2]	[1]	[99]
Kafići i noćni klubovi	[4]	[3]	[2]	[1]	[99]
Trgovački centar	[4]	[3]	[2]	[1]	[99]

12. Jeste li upoznati s poplavama koje su se ranije događale u vašoj županiji?

Da	[1]
Ne	[0]

13. [Ako je odgovor DA] Kojih se poplava sjećate?

Otvoreno pitanje

14. [Ako je odgovor DA] Kako ste saznali za poplave koje su pogodile vašu županiju?

U školi	[4]
U obitelji	[3]
Putem rodbine i prijatelja	[2]
Putem medija	[1]
Drugo (molimo navedite)	[99]

15. Koliko se informirano osjećate o poplavama?

Vrlo informirano	[4]
Prilično informirano	[3]
Malo informirano	[2]
Nimalo informirano	[1]

16. Koliko se informirano osjećate o mjerama za suočavanje s poplavama?

Vrlo informirano	[4]
Prilično informirano	[3]
Malo informirano	[2]
Nimalo informirano	[1]

17. Jeste li upoznati s inicijativama koje je vaša lokalna samouprava provela radi smanjenja rizika od poplava?

Da	[1]
Ne	[0]

18. Koji su vam glavni izvori informacija o rizicima od poplava? (moguće je označiti više odgovora)

Nacionalni mediji (TV, novine, radio)	[1]
Regionalni ili lokalni mediji	[2]
Društvene mreže	[3]
Članovi obitelji, prijatelji ili školski kolege	[4]
Znanstvenici	[5]
Nacionalne političke institucije	[6]
Regionalne ili lokalne političke institucije	[7]

Službe za upravljanje u izvanrednim situacijama (civilna zaštita, vatrogasci i sl.)	[8]
Podcasti	[9]
Drugo (molimo navedite)	[10]

19. Koliko smatrate vjerodostojnima informacije o rizicima od poplava iz sljedećih izvora? (jedan odgovor po retku)

	Vrlo vjerodostojno	Prilično vjerodostojno	Malo vjerodostojno	Nimalo vjerodostojno	*Ne znam*
Novinari	[4]	[3]	[2]	[1]	[99]
Znanstvenici	[4]	[3]	[2]	[1]	[99]
Nacionalne političke institucije	[4]	[3]	[2]	[1]	[99]
Regionalne ili lokalne političke institucije	[4]	[3]	[2]	[1]	[99]
Službe za upravljanje u izvanrednim situacijama	[4]	[3]	[2]	[1]	[99]
Mladi klimatski aktivisti					
Članovi obitelji, prijatelji ili školski kolege					

20. Prema vašem mišljenju, tko je odgovoran za sprječavanje šteta od poplava u vašem mjestu stanovanja? [rangirajte od najvažnijeg (1.) do najmanje važnog (6.).]

Europska unija	[1]
Vlada	[2]
Lokalne i regionalne vlasti	[3]
Privatna poduzeća	[4]
Ekološke udruge	[5]
Vi osobno	[6]

21. U kojoj mjeri se slažete sa sljedećim tvrdnjama? (jedan odgovor po retku)

	U velikoj mjeri	U priličnoj mjeri	U maloj mjeri	Nimalo	*Ne znam*
Malo je vjerojatno da bi poplava mogla oštetiti moj dom ili imovinu.	[4]	[3]	[2]	[1]	[99]
Smatram da mogu poduzeti mjere za smanjenje ili izbjegavanje posljedica poplava.	[4]	[3]	[2]	[1]	[99]
Svatko bi trebao poduzeti mjere za smanjenje rizika od poplava za svoj dom.	[4]	[3]	[2]	[1]	[99]
Svatko bi trebao imati osiguranje od poplava.	[4]	[3]	[2]	[1]	[99]

U svibnju 2022. neka područja grada Kaštela bila su pogođena poplavama nakon obilnih i dugotrajnih oborina.

22. Gdje ste se nalazili tijekom tog događaja?
☐ Kod kuće
☐ U školi
☐ Na ulici
☐ Drugo: _____

23. Tijekom dana poplave, jeste li osobno osjećali strah? Ocijenite na ljestvici od 1 (nimalo) do 10 (u velikoj mjeri).
Nimalo 1 2 3 4 5 6 7 8 9 10 U velikoj mjeri

24. Što smatrate glavnim uzrokom poplave 2023. godine?

Obilne kiše	[5]
Loše održavanje vodotoka	[4]
Topljenje snijega	[3]
Trajno prekrivanje tla / urbanizacija	[2]
Vjetrovi	[1]

Umjetno preusmjeravanje rijeka i kanala	[0]
Drugo (molimo navedite)	[10]

25. Koje su od sljedećih preventivnih mjera poduzete u vašem domu?
☐ Premještanje važnih predmeta na više katove
☐ Zaštita vrata i prozora od mogućeg prodora vode
☐ Izbjegavanje držanja vrijednih predmeta u podrumima ili garažama
☐ Informiranje o planovima lokalne samouprave za izvanredne situacije
Drugo:_____

26. Koji bi razlozi mogli spriječiti vas i vašu obitelj u poduzimanju preventivnih mjera?
☐ Ekonomski razlozi
☐ Nedostatak informacija
☐ Ne postoje prepreke
☐ Drugo (molimo navedite)_____

OBRAZOVANJE I ŠKOLA

27. Jeste li ikada sudjelovali u nastavi ili školskim aktivnostima o prevenciji rizika od poplava?

Da	[1]
Ne	[0]

28. Koliko često na nastavi s nastavnicima razgovarate o sljedećim društvenim temama?

	Nimalo	U maloj mjeri	U prilično mjeri	U velikoj mjeri	*Ne znam*
Problemi lokalnog područja u kojem se nalazi vaša škola	[4]	[3]	[2]	[1]	[99]
Znanstveno razmišljanje i istraživanje za društveni razvoj	[4]	[3]	[2]	[1]	[99]
Posljedice klimatskih promjena	[4]	[3]	[2]	[1]	[99]
Eko-anksioznost povezana s klimatskim promjenama	[4]	[3]	[2]	[1]	[99]
Ponašanja za održivi razvoj	[4]	[3]	[2]	[1]	[99]

29. Smatrate li da bi škole trebale uključiti aktivnosti koje se bave rizikom od poplava?

Definitivno da	[1]
Vjerojatno da	[2]
Vjerojatno ne	[3]
Definitivno ne	[4]

30. Tko bi, prema vašem mišljenju, trebao sudjelovati kao predavač u školskim edukacijama o riziku od poplava?

Nastavnici	[1]
Znanstvenici	[2]
Ekološki novinari / znanstveni komunikatori	[3]
Ekološki aktivisti	[4]
Političari	[5]
Influenceri	[6]
Mladi ekološki aktivisti	[7]
Civilna zaštita	

31. Smatrate li da bi klimatsko obrazovanje trebalo biti obavezno u školskom kurikulumu?

Da	[1]
Ne	[0]

32. Koliko smatrate da su vaši nastavnici pripremljeni za obradu sljedećih tema u nastavi?

	Nimalo	U maloj mjeri	U priličnoj mjeri	U velikoj mjeri	*Ne znam*
Uzroci i posljedice klimatskih promjena	[4]	[3]	[2]	[1]	[99]
Rješenja za probleme okoliša i klimatske promjene	[4]	[3]	[2]	[1]	[99]
Ponašanja za ekološki održiv razvoj	[4]	[3]	[2]	[1]	[99]

SOLIDARNOST I POMOĆ

33. Za vrijeme posljednje poplave, koliko vam je važna bila pomoć koju su pružili:

	Vrlo važna	Prilično važna	Malo važna	Nimalo važna	*Ne znam*
Građani/stanovništvo	[4]	[3]	[2]	[1]	[99]
Volonterske udruge	[4]	[3]	[2]	[1]	[99]
Lokalna uprava (općina, županija)	[4]	[3]	[2]	[1]	[99]
Vlada	[4]	[3]	[2]	[1]	[99]

34. Jeste li sudjelovali u pružanju pomoći nakon poplave, bilo izravno (uklanjanje blata, distribucija hrane i potrepština, itd.) ili neizravno (donacije novca, hrane, itd.)?

Da	[1]
Ne	[0]

35. Koliko solidarnosti ste osjetili od:

	U velikoj mjeri	U priličnoj mjeri	U maloj mjeri	Nimalo	*Ne znam*
Sugrađana pogođenih poplavom	[4]	[3]	[2]	[1]	[99]
Stanovništva drugih županija	[4]	[3]	[2]	[1]	[99]
Lokalne uprave (općina, županija)	[4]	[3]	[2]	[1]	[99]
Vlade	[4]	[3]	[2]	[1]	[99]

SOCIODEMOGRAFSKI PODATCI

36. Spol

muški	[1]
ženski	[2]
Ne žeim odgovoriti	[3]

37. Godina rođenja**:** _____

38. Mjesto prebivališta**:** _____

6. Annex 2: Questionnaire in English

ORIENTATIONS AND EXPOSURE TO SCIENCE AND TECHNOLOGY

1. In general, how much trust do you have in the following? (one answer per row)

	Very much	Quite a lot	A little	Not at all
a) Science in general	[4]	[3]	[2]	[1]
b) Scientists	[4]	[3]	[2]	[1]
c) Public research institutions (universities, research institutes)	[4]	[3]	[2]	[1]
d) Private research institutions (universities, research institutes)	[4]	[3]	[2]	[1]

2. In the past year, how many times have you done the following?

	Never	Once	More than once
Attended public meetings or debates on science and technology or environment and sustainability	[1]	[2]	[3]
Visited science museums	[1]	[2]	[3]
Attended festivals or exhibitions on environmental topics	[1]	[2]	[3]
Taken part in protest events or mobilizations on environmental issues (e.g. Climate Strikes, Climate Marches, etc.)	[1]	[2]	[3]

CLIMATE CHANGE

3. In your opinion, does climate change result from natural causes, human activity, or both? (single answer – rotate list)

Only natural causes	[1]
Mainly natural causes	[2]
Both (natural causes and human activities equally)	[3]
Mainly human activities	[4]
Only human activities	[5]
No causes (neither natural nor human activities)	[0]

4. In your opinion, what is the main obstacle to acting against climate change? (single answer)

There are too many economic interests	[1]
Many politicians are not prepared to deal with the issue	[2]
People do not want to change their behavior	[3]
I don't know	[99]

5. In your opinion, who is the main responsible for fighting climate change?

The European Union	[1]
The national government	[2]
Local and regional authorities	[3]
Private companies	[4]
Environmental groups	[5]
You personally	[6]
Everyone	[7]
I don't know	[99]

ENVIRONMENTAL RISKS

6. To what extent do you agree with the following statements about environmental issues?

	Strongly disagree			Strongly agree
Science and technology can solve all environmental problems.				
Personally, I can influence what happens to the environment.				
We can still find solutions to environmental problems.				

People should be more interested in environmental protection.				
I am optimistic about the future of the planet.				
The natural world is sacred and we should leave it alone.				
People worry too much about environmental problems.				
I believe each of us can make a significant contribution to protecting the environment.				
It is acceptable to use animals for medical experiments if this can save human lives.				
Environmental problems should be left to specialists.				
It is the responsibility of rich countries to solve environmental problems worldwide.				
Animals should have the same right to life as humans.				
Threats to the environment are none of my business.				
Environmental problems are exaggerated.				

7. To what extent do you feel exposed to the following environmental risks and threats?

	Very much	Quite a lot	A little	Not at all	I don't know
a) Pollution	[4]	[3]	[2]	[1]	[99]
b) Floods	[4]	[3]	[2]	[1]	[99]
c) Drought and/or water scarcity	[4]	[3]	[2]	[1]	[99]
d) Wildfires	[4]	[3]	[2]	[1]	[99]
e) Landslides	[4]	[3]	[2]	[1]	[99]
f) Earthquakes and/or volcanic eruptions	[4]	[3]	[2]	[1]	[99]

FLOODS

8. Thinking about the possibility of a flood, how worried do you feel?

☐ Not worried at all ☐ Slightly worried ☐ Very worried

9. How often do you think about the flood risk that could affect your area?
☐ Never ☐ Rarely ☐ Often

10. On a scale from 1 to 10 (where 1 means "unlikely" and 10 "very likely"), how would you describe the flood risk in your area?

1 2 3 4 5 6 7 8 9 10
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

11. How much do you think the following places you frequent are at risk in the event of a flood?

	Very much	Quite a lot	A little	Not at all	*I don't know*
- Your home	[4]	[3]	[2]	[1]	[99]
Your school	[4]	[3]	[2]	[1]	[99]
The routes you usually take	[4]	[3]	[2]	[1]	[99]
The gym (or the place where you practice sports)	[4]	[3]	[2]	[1]	[99]
Church or youth center	[4]	[3]	[2]	[1]	[99]
Parks and green areas	[4]	[3]	[2]	[1]	[99]
Train station	[4]	[3]	[2]	[1]	[99]
Bus station	[4]	[3]	[2]	[1]	[99]
Bars and nightlife venues	[4]	[3]	[2]	[1]	[99]
Shopping center	[4]	[3]	[2]	[1]	[99]

12. Are you aware of floods that have historically occurred in your Region?

Yes	[1]
No	[0]

13. [If YES] Which one(s) do you remember?

(open-ended)

14. [If YES] How did you learn about the floods that affected your Region?

At school	[4]

In the family	[3]
Through relatives and friends	[2]
Through the media	[1]
Other (please specify)	[99]

15. How informed do you feel about floods?

Very	[4]
Quite	[3]
Little	[2]
Not at all	[1]

16. And about measures to deal with them?

Very	[4]
Quite	[3]
Little	[2]
Not at all	[1]

17. Are you aware of initiatives undertaken by your municipality to reduce flood risk?

Yes	[1]
No	[0]

18. Which of the following information sources are your main ones regarding flood risks? (multiple answers possible)

- National media (TV, newspapers, radio)	[1]
- Regional or local media	[2]
Social network	[3]
- Relatives, friends or classmates	[4]
Scientists	[5]
- National political authorities	[6]
- Regional or local political authorities	[7]
- Emergency management services (Civil Protection, Fire Brigade, etc.)	[8]
Podcast	[9]
- Other (please specify)	[10]

19. How credible do you consider the news on flood risks from the following sources? (one answer per row)

	Very much	Quite a lot	A little	Not at all	*I don't know*
Journalists	[4]	[3]	[2]	[1]	[99]
Scientists	[4]	[3]	[2]	[1]	[99]
- National political authorities	[4]	[3]	[2]	[1]	[99]
- Regional or local political authorities	[4]	[3]	[2]	[1]	[99]
- Emergency management services	[4]	[3]	[2]	[1]	[99]
Young climate activists					
- Relatives, friends or classmates					

20. In your opinion, who is responsible for preventing flood damage in your area of residence? [Rank them from what you consider most important (1st) to what you consider least important (6th).]]

The European Union	[1]
The national government	[2]
Local and regional authorities	[3]
Private companies	[4]
Environmental groups	[5]
You personally	[6]

21. To what extent do you agree with the following statements? (one answer per row)

	Very much	Quite	Little	Not at all	*I don't know*
I believe it is unlikely that a flood could damage my home or property.	[4]	[3]	[2]	[1]	[99]
- I believe I am able to take measures to reduce or avoid the impact of floods.	[4]	[3]	[2]	[1]	[99]

- Everyone should adopt measures to reduce the flood risk to their home.	[4]	[3]	[2]	[1]	[99]
- Everyone should have flood insurance.	[4]	[3]	[2]	[1]	[99]

In May 2022, some areas of the city of Kaštela were affected by floods following heavy and continuous rainfall.

22. Where were you during this event?
☐ At home
☐ At school
☐ On the street
☐ Other: _____

23. During the days of the flood, did you personally feel fear? Rate on a scale from 1 (Not at all) to 10 (Very much).
Not at all 1 2 3 4 5 6 7 8 9 10 Very much

24. What do you think was the main cause of the 2023 flood?

Heavy rainfalls	[5]
Poor river maintenance	[4]
Snowmelt	[3]
Land sealing / urbanization	[2]
Winds	[1]
Artificial diversion of rivers and canals	[0]
Other (please specify)	[10]

25. Which of the following preventive measures were adopted in your home?
☐ Moving important objects to upper floors
☐ Protecting doors and windows from possible flooding
☐ Avoiding keeping valuable items in basements or garages
☐ Learning about municipal emergency plans
Other:_____

26. What reasons could prevent you and your family from adopting preventive measures?

☐ Economic reasons
☐ Lack of information
☐ There are no obstacles
☐ Other (please specify)_____

EDUCATION AND SCHOOL

27. Have you ever attended a course or school activity on flood risk prevention?

Yes	[1]
No	[0]

28. In class with your teachers, how often do you talk about the following social issues?

	Not at all	A little	Quite a lot	Very much	*I don't know*
Problems of the local area where your school is located	[4]	[3]	[2]	[1]	[99]
Scientific thinking and research for social development	[4]	[3]	[2]	[1]	[99]
Consequences of climate change	[4]	[3]	[2]	[1]	[99]
Eco-anxiety related to climate change	[4]	[3]	[2]	[1]	[99]
Behaviors for sustainable development	[4]	[3]	[2]	[1]	[99]

29. Do you think schools should include activities addressing flood risk?

Certainly yes	[1]
Probably yes	[2]
Probably no	[3]
Certainly nono	[4]

30. Who would you like to be the speakers in possible training activities on flood risk during school hours?

Teachers	[1]
Scientists	[2]
Environmental journalists / science communicators	[3]
Environmentalists	[4]
Politicians	[5]
Influencers	[6]
Young environmental activists	[7]
Civil Protection	

31. Do you think Climate Education should be compulsory in the school curriculum?

Yes	[1]
No	[0]

32. How prepared do you think your teachers are to address the following topics in class?

	Not at all	A little	Quite	Very	*I don't know*
Causes and consequences of climate change	[4]	[3]	[2]	[1]	[99]
Solutions to environmental problems and climate change	[4]	[3]	[2]	[1]	[99]
Behaviors for eco-sustainable development	[4]	[3]	[2]	[1]	[99]

SOLIDARITY AND AID

33. Regarding the most recent flood, how important do you consider the help provided by:

	Very	Quite	Quite	Not at all	*I don't know*
Citizens / population	[4]	[3]	[2]	[1]	[99]
- Volunteer associations	[4]	[3]	[2]	[1]	[99]

- Local administrations (municipality, region)	[4]	[3]	[2]	[1]	[99]
- National government	[4]	[3]	[2]	[1]	[99]

34. Did you participate directly (shoveling mud, distributing food supplies, etc.) or indirectly (sending money, food donations, etc.) in the relief efforts?

Yes	[1]
No	[0]

35. How much solidarity did you feel from:

	Very	Quite	Little	Not at all	*I don't know*
Fellow citizens affected by the flood	[4]	[3]	[2]	[1]	[99]
Population of other regions	[4]	[3]	[2]	[1]	[99]
Local administrations (municipality, region)	[4]	[3]	[2]	[1]	[99]
National government	[4]	[3]	[2]	[1]	[99]

SOCIO-DEMOGRAPHIC DATA

36. Gender

male	[1]
female	[2]
Prefer not to answer	[3]

37. Year of birth**:** _____

38. Municipality of residence**:** _____